Exam. Code : 103203
Subject Code : 1093

B.A./B.Sc. 3rd Semester

COMPUTER APPLICATION (Operating System)

Time Allowed—3 Hours]   [Maximum Marks—75

Note :— Attempt any **FIVE** questions in all, selecting at least **ONE** question from each of the Sections A, B, C and D.

SECTION—A

1. (a) What is an operating system ? Explain its evolution and language related developments.   7.5

   (b) Distinguish between :

   (i) Compiler and interpreter

   (ii) Assembly and machine languages   7.5

2. Distinguish between single and multi-user operating systems with examples.   15

SECTION—B

3. Compute the Average Waiting time and Turnaround time for the following set of processes by applying FCFS, preemptive SJF algorithms :

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Process	Arrival Time (ms)	CPU burst (ms)
P_1	0	10
P_2	1	29
P_3	2	3
P_4	3	7
P_5	4	12

4. Explain various memory management methods in detail.

15

SECTION—C

5. (a) Explain the UNIX File system in detail. 10

(b) Explain the concept of Kernel and Shell. 5

6. What are the features and benefits of Unix ? 15

SECTION—D

7. (a) What is a filter in UNIX ? List out various filters in UNIX. Explain any two of them. 7.5

(b) What are the types of shells in Unix ? Explain them in detail. 7.5

8. (a) Explain any file commands in Unix. 7.5

(b) What are the types of shells in Unix ? Explain in detail. 7.5